Commonwealth of Kentucky
Division for Air Quality

COMMENTS AND RESPONSE

ON THE DRAFT PERMIT

Conditional Major, Operating
Permit: F-08-008
Meritor Heavy Breaking Systems (U.S.A.), Inc.
Franklin, KY 42134
June 9, 2008
Rita Arguello, Reviewer

SOURCE ID:	21-213-00015
AGENCY INTEREST:	3983
ACTIVITY:	APE20070001

SOURCE DESCRIPTION:

Meritor Heavy Breaking Systems (U.S.A.), Inc. (Meritor) is an existing source located in Franklin, KY. This facility manufactures heavy vehicle brake systems. The plant consists of three air make-up units, one washing/rinsing unit that contains three baths, four furnaces, two electric arc induction furnaces, a primary and backup pressure pour holding furnaces, a finishing/machining department, a shotblast unit and one paint spray booth.

PUBLIC AND AFFECTED STATE REVIEW:

On April 24, 2008, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *Franklin Favorite* in Franklin, Kentucky. The public comment period expired 30 days from the date of publication. No states are affected by this permit action.

Comments were received from Meritor Heavy Breaking Systems on May 23, 2008. Minor changes were made to the permit as a result of the comments received; however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. The following is a detailed explanation of changes made to the permit and supporting documents.

COMMENTS AND RESPONSE:

Comments on Meritor Heavy Braking Systems (U.S.A.) Draft Conditional Major Air Quality Permit submitted by Jenna Rodgers, Environmental, Health & Safety Manager.

Cover Page

1. The full legal name of the facility is: Meritor Heavy Braking Systems (U.S.A.), Inc. This should be used in place of "Meritor" on the cover page of the permit.

Division's response: Comment acknowledged, change made.

Conditional Major Permit

1. **Page 3, Testing Requirements Applicable to Emission Unit 12 (-)**
   a. The stack testing requirements in the draft permit reference testing for "PM/PM10"; which of these pollutant is the facility being asked to test? Since the methodology for testing these pollutants is not the same, the permit should clarify. Incidentally, since none of the facility's sources have limits on PM10 emissions, we are unclear as to why PM10 testing would be required.

   a. *Division's response*: Comment acknowledged. The limits for Particulate Matter (PM/PM10) emissions shall not exceed 90 tons per year, and it has been added to Section D. Meritor has a Conditional major limit to avoid Title V permit for PM10. PM10 is the regulated air pollutant under Title V provisions. However, the facility can test for PM using method 5 and consider all emissions to be PM10. If you want to test for both use test method 201 for PM10 and test method 5 for PM.

   b. Also, the language of the testing requirement implies that the results will be used to determine "control efficiency" – we don't believe this is appropriate terminology, in that the results of stack testing performed downstream of the baghouse will not directly yield information that can be used to calculate control efficiency. We therefore suggest that the reference to "control efficiency" be removed.

   b. *Division's response*: Comment acknowledged. Reference to control efficiency has been removed from the Testing Requirements.

   c. Most importantly, the condition in question contains a requirement to perform testing on the Shot Blasting Machine baghouse which exhausts indoors (and incidentally, would appear to be eligible for classification as an insignificant activity); we do not understand what useful purpose testing of this unit would serve. As such, we respectfully submit that Item b should be omitted from the "Testing Requirements" section; this would address all of the comments set forth above.

   c. *Division's response*: Comment acknowledged. The Division disagrees in part. The Shot Blasting Machine has a potential to emit of 218.98 tons per year of PM, it is a significant activity, and therefore this equipment should be in Section B. Item b has been removed. See response 1 b. Monitoring of baghouse will be required. See Section B, 04(100),12(-) Specific Monitoring Requirements, Specific Recordkeeping Requirements, Specific Reporting Requirements and Specific Control Equipment Operating Conditions.

2. **Page 5, Source Descriptions for Emission Units 05 (200) and 06 (210)** The induction furnaces comprising these emission units are described as each having a metal charge rate of 4.4 tons/hour. However, we have recently been in touch with the equipment vendor for these units, and have learned that the maximum melting rate is actually 3.93 tons/hour for each furnace. We believe it would be appropriate to reflect this melting rate in the renewed permit.

   Division's response: Comment acknowledged, change made.

3. **Page 6, Testing Requirements Applicable to Emission Units 05 (200) and 06 (210)**
   a. There is a clause on Page 6 in the "Testing Requirements" section that implies the testing the facility is being asked to do on the baghouse-controlled furnaces is to determine "capture efficiency" – we don't believe this is appropriate terminology, in that the results of stack testing performed downstream of the baghouses will not directly yield information that can be used to calculate capture efficiency. We therefore suggest that the phrase "for capture efficiency" be removed.

   a. *Division's response*: Comment acknowledged. Capture efficiency has been deleted.

   b. Also, the stack testing requirements in the draft permit reference testing for "PM/PM10"; which of these pollutant is the facility being asked to test? Since the methodology for testing these pollutants is not the same, the permit should clarify. Incidentally, since none of the facility's sources have limits on PM10 emissions, we are unclear as to why PM10 testing would be required.

   b. *Division's response*: Comment acknowledged. See respond 1.a.

4. **Page 9, Testing Requirements Applicable to Emission Units 09 (240) and 07 (220)**
   a. This condition sets forth a requirement to test for particulate matter emitted from building exhaust fans. We respectfully suggest that quantitative testing of these fugitive emissions is unnecessary, that the resultant information will be of limited practical utility, and that a better approach to evaluate these non-stack emissions would be via evaluation of visible emissions (i.e., opacity) as provided for in the new Subpart ZZZZZ NESHAP for Iron and Steel Foundries Area Sources which is applicable to this facility.

   a. *Division's response*: Comment acknowledged. Change made, the reference to exhaust fans has been deleted. We can not apply Regulation 40 CFR 63 Subpart ZZZZZ, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources, (73 FR 252, January 2, 2008)[1], at this point because of the following:
   40 CFR 63.10880(f), if you own or operate an existing affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's metal melt production for calendar year 2008. **If the metal melts, production for calendar year 2008 is 20,000 tons or less, your area source is a small foundry.**
   Per 40 CFR 63.10881,
   a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by the dates in paragraphs (a)(1) through (3) of this section.

   > (1) Not later than January 2, 2009 for the pollution prevention management practices for metallic scrap in §63.10885(a) and binder formulations in §63.10886.
   > (2) Not later than January 4, 2010 for the pollution prevention management practices for mercury in §63.10885(b).
   > (3) Except as provided in paragraph 63.10881(d) of this section, not later than 2 years after the date of your large foundry's notification of the initial determination required in §63.10880(f) for the standards and management practices in §63.10895.

Per 40 CFR 63.10881 (d) Following the initial determination for an existing affected source required in §63.10880(f),

> (ii) If your small foundry had previously been classified as a large foundry, you must comply with the requirements for a large foundry no later than the date of your foundry's most recent notification that the annual metal melt production exceeded 20,000 tons.

Meritor does not qualify as a large foundry facility for 40 CFR 63 Subpart ZZZZZ, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources, (73 FR 252, January 2, 2008), at this time under permit F-08-0008.

b. More specifically, we submit that testing of the exhaust fans will not yield valuable information because, as referenced in the preamble to the above-referenced area source rule, "…overall building ventilation and balancing air flow in the foundry is a balancing act, and varies with the outdoor temperature."1 As such, it is not feasible to conduct "one-time testing" that adequately quantifies typical emissions, and any resultant emissions data should therefore not be used to establish emission limits that are enforceable as a practical matter, or used to derive emission factors for future use.

b. *Division's response*: Comment acknowledged. *," One time" has been deleted.*

c. Also, the stack testing requirements in the draft permit reference testing for "PM/PM10"; which of these pollutant is the facility being asked to test? Since the methodology for testing these pollutants is not the same, the permit should clarify. Incidentally, since none of the facility's sources has limits on PM10 emissions, we are unclear as to why PM10 testing would be required.

c. *Division's response*: Comment acknowledged. Please read respond 1.a.

d. Finally, as referenced above, U.S. EPA recently considered fugitive emission of particulate species and hazardous air pollutant (HAP) metals from foundry sources in establishing the aforementioned Subpart ZZZZZ requirements, and apparently concluded that such emission points were best addressed via evaluation of visible emissions (not testing). For this reason, and for the other reasons outlined above, we respectfully submit that Item b should be omitted from the "Testing Requirements" section; this would address all of the comments set forth above.

d. *Division's response*: Comment acknowledged. See response 4.a.

5. **Page 10, Section B – Description of Emission Unit 13 (530)** This unit no longer uses a primer or clean up solvent. Also, the maximum theoretical coating application rate (although not the actual rate of application) has been determined to be 8.63 gallons per hour. We believe the unit description should reflect this information.

Division's response: Comment acknowledged, *change made.*

1 Federal Register, Volume 73, Number 1, Page 241 (January 2, 2008)

6. **Page 12, Section C – Insignificant Activities**
   a. During a recent corporate compliance audit, it was noted that there is a unit at the facility that should be listed as an "insignificant activity" in the permit; this is a Cummins Model GTA8.3G2 natural gas-fired emergency generator, with a rated capacity of 230 HP.

   a. Division's response: *Comment acknowledged,* change has been made to the Insignificant activity.

   b. Also, the natural gas-fired drying heater currently listed as Item 7 in the insignificant activities section of the draft permit, Unit 10 (620), is described as having a maximum heat input of 1.65 MMBtu/hour. It has recently been determined that the capacity of this unit is actually 400,000 Btu/hour.

   b. Division's response: *Comment acknowledged,* change has been made. It has been added Unit 10 (620).

   c. Finally, as referenced above and for the reasons previously described in our December 11, 2002 letter to April Webb of KDAQ, we believe the Shotblast emission unit 12 (-), which exhausts inside the plant, should be eligible for treatment as an insignificant activity.

   c. Division's response: Comment acknowledged, and disagreed. We have on file your letter of December 2002 requesting the Shotblast emission unit 12 (-) to be moved to insignificant activities. The permit was issued on 2003 with the emission unit 12 (-) on Section B; due to the calculation on the potential to emit mentioned above in question 2; we cannot consider it an insignificant activity.

7. **Page 14, Section D.5.a** There appears to be an inconsistency between the text of this condition, which references a lead emission limit of 0.185 pounds/hour, and the associated equation, which indicates that the limit is 1.85 pound/hour.

   Division's response: Comment acknowledged. The limit for lead is 0.185 pounds per hour.

8. **Section B – Emission Points, Emission Units, Applicable Regulations and Operating Conditions** We did not note any reference to the aforementioned new Subpart ZZZZZ NESHAP for Iron and Steel Foundries Area Sources which we have previously informed KDAQ to be applicable to this facility. We believe some reference to the applicable area source requirements is appropriate.

   Division's response: *Comment acknowledged*, change made. 40 CFR 63 Subpart ZZZZZ, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Sources Classified as Small Foundries, has been incorporated. The prevention management practices in Operating Limitations as been added, as well as Record Keeping Requirements for the emission units 05(200), 06(210), 16(-) and 17(-). See Statement of Basis also.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.